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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/315,058	05/20/1999	YOSHIHIRO ONO	OSP-8180	5968

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EXAMINER

OPSASNICK, MICHAEL N

ART UNIT	PAPER NUMBER
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2655

19

DATE MAILED: 12/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

TS

Office Action Summary

Application No.

09/315,058

Applicant(s)

ONO

Examiner

Michael N. Opsasnick

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henley et al (5526353) in view of Shiono (4618936) in further view of Kondo et al (4993022).

As per claim 1, Henley et al (5526353) teaches:

“a voice transceiver....analog data” as compressed voice codes (col. 10 lines 9-11)

“an expansion means....digital voice data” as expanding compressed data (col. 10 lines 12-15)

“a buffer.....voice data” as dual port memory (col. 10 lines 54-58)

“a conversion means....said detection signal.....and speaker means for emitting said analog voice data into the air” as converting data back to analog for listener (col. 7 lines 27-33)

Henley et al (5526353) further teaches:

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“further comprising a data control means for controlling.....based on said detection signal, wherein said data control means outputs a dummy code.....buffer means is less than a required amount.....when said buffer means approaches an overflow amount.....does not allow the output of said digital voice data to said conversion means” as inserting white noise when there is not enough data and decimation when there is too much data (col. 15 lines 7-46)

Henley et al (5526353) does not explicitly teach detection means, however, Shiono teaches: “a detection means....detection result” as when buffer is full and reassembly of data when acquired (Fig. 5, subblocks 34,36,40,62,64, and 44; col.4 line 10 – col. 6 line 65). Therefore, it would have been obvious to one of ordinary skill in the art of speech signal processing to modify the teachings of Henley with a CPU monitoring of a buffer memory because it would advantageously allow the system to produce corresponding speech with data in a timely fashion (col. 1 lines 10-39).

The combination of Henley et al (5526353) in view of Shiono (4618936) does not explicitly teach a selective disposal unit for selectively discarding digital voice data, however, Kondo teaches a technique to selectively discard data based on sound quality (col. 14 line 65 – col. 15 line 5; fig. 8). Therefore, it would have been obvious to one of ordinary skill in the art of speech data management to modify the teachings of the combination of Henley et al (5526353) in view of Shiono (4618936) with selective speech data discarding because it would allow for the removal of bad sound data as well as avoiding buffer overflow (Kondo, col. 14 line 65 – col. 15 line 6).

As per claim 3, Henley et al (5526353) teaches:

“when said dummy code is inputted into said expansion means.....outputs digital voice data in which the strength of said compressed voice code inputted immediately prior to said dummy signal is reduced” as transmitted silence is reduced compared to previously accepted signal levels (col. 15 lines 1-16).

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Henley et al (5526353) in view of Shiono (4618936) in view of Kondo (4993022), in further view of Li et al (5617423).

As per claim 4, Henley et al (5526353) teaches a microphone means for inputting voice data (col. 10 lines 9-11). Henley et al (5526353) does not explicitly teach echo component removal means, however, Li et al (5617423) teaches echo cancellation (col. 30 lines 7-23). Therefore, it would have been obvious to one of ordinary skill in the art of voice transmission to modify the teachings of Henley et al (5526353) in view of Shiono (4618936) in view of Kondo (4993022) with an echo cancellation feature because it would advantageously remove unwanted feedback and echo from the signal of interest (Li et al (5617423), col. 7 lines 40-46).

Response to Arguments

4. Applicant's arguments filed August 12, 2003 have been fully considered but they are not persuasive. As per applicant's arguments that Kondo sorts the speech packets (whereas the instant invention does not), examiner makes the point that the applicant is arguing the reasoning as to why Kondo performs the sorting; although Kondo may teach this extra step, Kondo teaches a reductions of data to avoid the overflow problem (col. 14 lines 65-68). As per the arguments with respect to the combination of Henley in view of Shiono, in further view of Kondo, examiner argues that this combination teaches the location of the buffer memory (matching applicant's claim language), and that Kondo teaches the concept of overflow control, not as much the location of the memory. The common element of the prior art systems is data buffer control, not transmitter/receiver systems. The motivation to combine has been pointed to in the prior art systems, not gleaned from applicant's specification. With respect to the arguments regarding low and high buffer rates, examiner notes that Henley teaches the insertion of data (col. 15 lines 7-46).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872 9314,

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

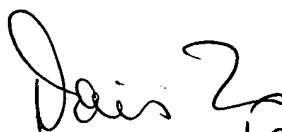
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (703)305-4089, who is available Tuesday-Thursday, 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To, can be reached at (703)305-4827. The facsimile phone number for this group is (703)872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (703) 305-4750, the 2600 Customer Service telephone number is (703) 306-0377.

mno

12/2/2003


DORIS H. TO 12/10/03
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600